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(54) Title: MARKING SYSTEM AND METHOD

(57) **Abstract:** A methodology for facilitating the identification, authentication or quality control of packaged products is described comprising a marking and an authentication phase. In the marking phase the method involves obtaining an analytical specification, and for example an analytical spectrum, of a reference chemical composition for the product; and recording the data on a machine readable data storage means provided in direct mechanical association with the packaging thereof, and for example being incorporated into or onto or as a part of such packaging. The authentication phase comprises applying a suitable data reader to the data storage means to read the recorded data and reconstruct the recorded analytical specification; chemically analysing a sample of the product to obtain a measured analytical specification; comparing the measured and recorded readings within predetermined tolerance limits. A system to perform the method and a product marked accordingly are also described.